

[illegible]

Monday, May 30, 2011 11:25:22 AM



**00000000000000000000000000000000**

1. The first step in the process is to identify the problem. This involves gathering information about the situation and understanding the needs of the stakeholders involved.

**THE UNIVERSITY OF CHICAGO**

**Cust Item ID:**

**Abstract**

**Customer:**

[illegible][illegible]

Date:

**Insp.  
Stamp**

Rev A

0.00

FLOW WATER JET,

4

## Memo

0.00

1-Cut as per Dwg D3198    ☐ Dwg Rev: 1    ☐ Prog Rev: 1    ☐ 2-  
Deburr if necessary

324. 17c

①

1811-5-30

QC2- Inspect parts off machine FAI/FAIB

0.00

## Memo

0.00

QC

## Quality Control

RII-5-3L

QC8- Inspect parts - second check

0.00

## Memo

0.00

QC

## Quality Control

x60

8/10/5130

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 70149

Monday, May 30, 2011 11:25:22 AM



Page 2

Item ID: D3198-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Fitting

Start Date: 5/30/2011 Start Qty: 5.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 5.00

Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



Brake NC

NC BRAKE

0.00

Memo

0.00

SB 1166101

Brake NC

1-Deburr if necessary ☐ 2-Form as per Dwg D3198

140



QC

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

Sub 6101



Quality Control

150



Powdercoat

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

Memo

0.00

START TIME:

☐ FINISH TIME:

☐ OVEN TEMPERATURE:

8-45

320°F

9-15

6X ~~✓~~ M 11/26/02

M 115128

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 70149**

Monday, May 30, 2011 11:25:22 AM



Page 3

Item ID: D3198-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Fitting

Start Date: 5/30/2011 Start Qty: 5.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 5.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				6		BR 11-6-2	
170  Packaging Packaging	Identify as per dwg & Stock Location <u>246A</u>  Memo	0.00  0.00							11/6/25/16
180  QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00  0.00							11/6/30/16 LME 11-06-03

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Monday, May 30, 2011 11:25:16 AM

Page 1

Work Order ID: 70149

Parent Item: D3198-1

Parent Item Name: Fitting




Start Date: 5/30/2011

Required Date: 6/10/2011

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP: A 03.11.11 New Issue KJ/RF  
IPP Rev:B Now on Waterjet 07-01-09 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S11GA  304/316 0.125 Sheet		Purchased	No			100	sf	136.7000	0.105	0.552632	1		



1211-5-30

Location

Loc Qty

Loc Code

MAT020

136.7

117494

136.7

117494



W/O:		WORK ORDER CHANGES					
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W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

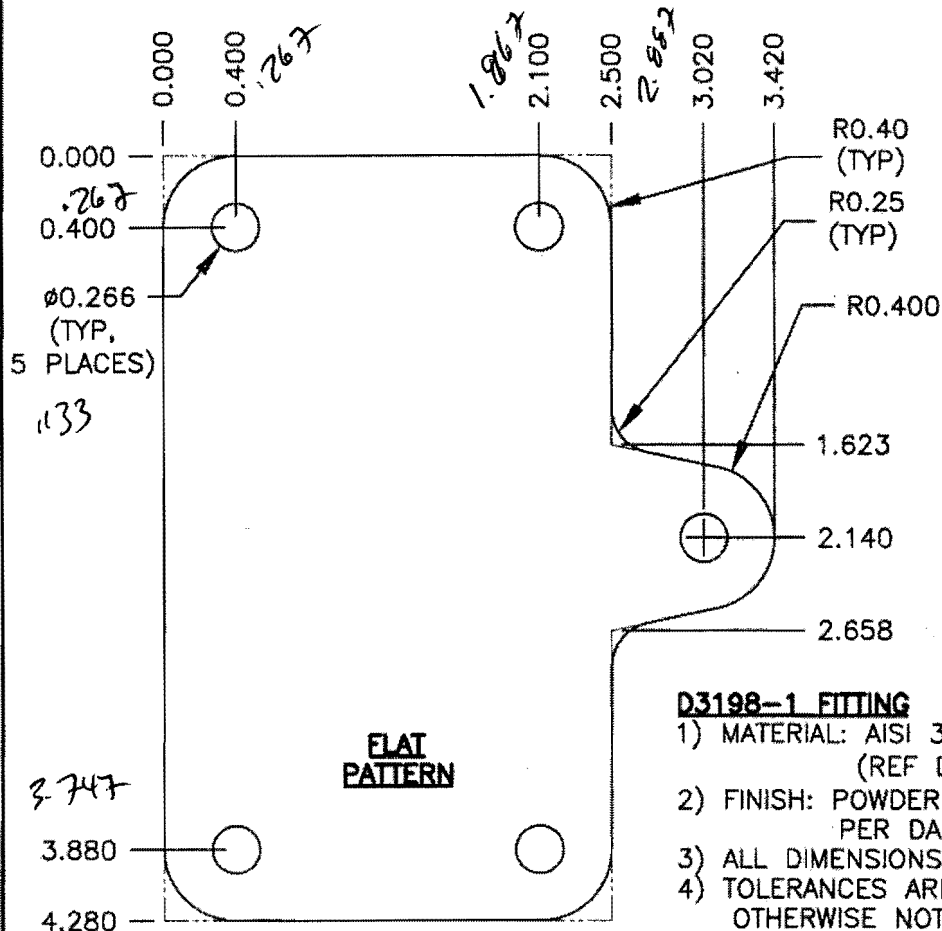
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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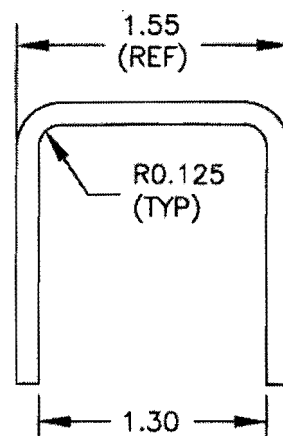
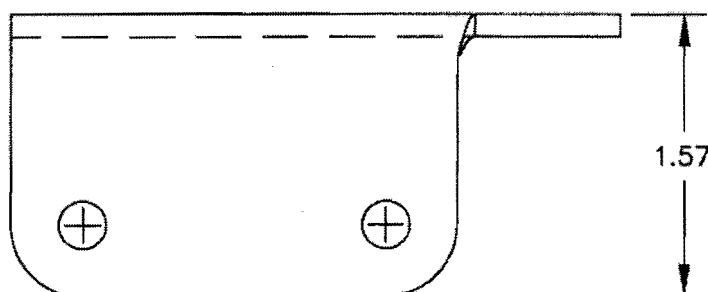
DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3198	REV. A SHEET 1 OF 1
DATE 03.09.26		TITLE FITTING	SCALE 1:1
A	03.09.26	NEW ISSUE	



#### D3198-1 FITTING

- 1) MATERIAL: AISI 304/316 SS SHEET 0.125 THICK (REF DART SPEC. M304S11GA)
- 2) FINISH: POWDER COAT GREY SANDEX (4.3.5.6) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

RELEASED  
03.10.10 *#*



**BEND  
DETAIL**

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**Dart Aerospace Ltd**

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